

# SONY

## SERVICE MANUAL

ETC.



**SONY CORPORATION**  
7-35 KITASHINAGAWA-6, SHINAGAWA-KU  
TOKYO, JAPAN

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Printed in Japan

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# SECTION 1

## GENERAL DESCRIPTION

### 1-1. INTRODUCTION

This manual provides service information for SONY Portable Videocorder DV-2400. Camera and Monitor Service information is found in Separate Service Manuals.

### 1-2. SPECIFICATIONS

Video recording system:	Slant-track scanning. Frequency servo-control.
Recording Signal:	2:1 interlaced composite video signal based on American TV standards.
Recording Time:	20 minutes continuously using V-30D tape.
Tape Speed:	7.5 inches per second.
Tape Width:	$\frac{1}{2}$ inch.
Video modulation system:	Frequency modulation.
Resolution:	Approximately 220 lines.
Video Signal-to-noise ratio:	Greater than 40 dB.
Video input:	1.0V (peak to peak) sync negative, 50 ohms, at pin 1 of the camera cable connector. (Ground return Pin 2)
Audio input:	65 dB, 600 ohms, at Pin 7 of the camera cable connector (Ground return Pin 8).
Audio frequency range:	100-8000 Hz
Audio signal-to-noise ratio:	Greater than 40 dB.

### 1-3. CONTROLS, INDICATOR AND INPUT-OUTPUT CONNECTORS

A. FUNCTION LEVER Sets up the machine for recording operations. The function lever applies power to the camera and the Videocorder, but the audio bias/erase oscillator and the record amplifier remain unpowered.

B. START BUTTON supplies power to the record amplifier audio bias/erase oscillator and plunger. Pinch roller presses against capstan to feed tape. Take-up reel is driven through a friction-clutch.

C. BATTERY INDICATOR  
The pointer shows battery condition when the Videocorder is operating (Function lever is in the STANDBY Position) Black Zone reading shows good battery condition, Red Zone reading shows the batteries need to be recharged.

D. EARPHONE JACK  
To monitor the audio signal during the recording operation, connect the earphone to this jack.

E. EXT. POWER IN  
To connect the optional AC power adaptor, MODEL AC-2400. The Videocorder can be operated directly from the household power line when the AC-2400 has been connected.

F. CAMERA CONNECTOR  
To connect the SONY VIDEO CAMERA DVC-2400.

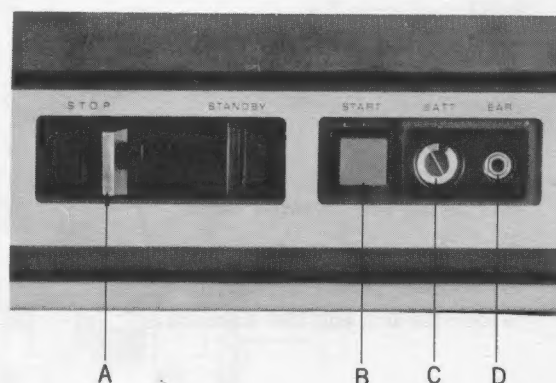


Fig.1-1 CONTROLS and INDICATOR

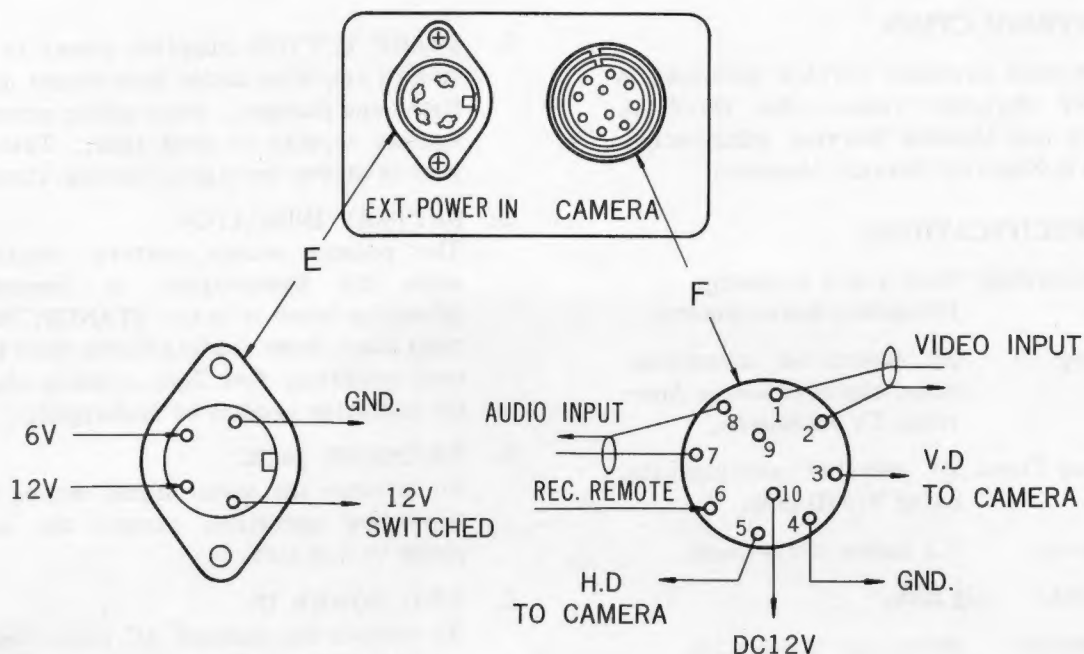


Fig. 1-2 INPUT-OUTPUT Connections

#### 1-4. OPERATING INSTRUCTIONS

1. Place a full reel on the left-hand reel spindle and an empty reel on the right-hand reel spindle.  
Be sure that the slot of the reel engages the guide pin of the reel holder and thread the tape.
2. Connect the Video Camera to Videocorder using the camera cable.
3. Set the FUNCTION LEVER to the STANDBY position. This turns on the Videocorder and the camera.
4. Adjust the camera to obtain a satisfactory picture as displayed on the viewfinder.  
To start the recording, depress the red START button on the control panel of the Videocorder or pull the trigger on the hand grip of the camera.
5. To stop recording, release the trigger on the hand grip of the camera or push the red START button and it will pop up. The camera and Videocorder will remain in the STANDBY condition.
6. At the end of the recording session, set the FUNCTION LEVER to Stop.